IOWA DEPARTMENT OF NATURAL RESOURCES NPDES PERMIT APPLICATION
FORM 3 FOR INDUSTRIAL FACILITIES

FORM 3 - FACILITIES WHICH DISCHARGE PROCESS WASTEWATER – EXISTING SOURCES

I. Sources of Pollution
For each outfall, provide a description of: (1) all operations contributing wastewater to the discharge including process wastewater, cooling water, stormwater, etc., (2) the monthly average and daily maximum flow contributed by each operation, (3) the frequency and duration of the discharge from each operation except stormwater, (4) the stream that receives the discharge.

Outfall No.	Operation	Flow		Frequency		Duration
		avg	max	days/week	months/year	(in days)
Receiving Stream Name:						
Receiving Stream Name:						
Receiving Stream Name:						

Facility Name:	

II. Production

A. Is this facility subject to a federal effluent guideline promulgated under Section 304 of the Clean Water Act?

☐ **Yes** ☐ **No** **If "yes" list 40 CFR part number if known**

B. Are the applicable effluent guidelines expressed in terms of production? (See Table 1 of the Instructions)

☐ **Yes** ☐ **No**

C. If you answered "YES" to Item IIB list the quantity or quantities which represent your actual production expressed in the same terms as applicable.

Quantity Per Day	Operation, Product, Raw Material	Units

III. Effluent Characteristics

List any of the pollutants shown in Table 2 of the instructions which you know or have reason to believe is discharged, or may be discharged, from any outfall. For each pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data available.

Pollutant	Source	Concentration		Outfall	Certified Laboratory Number
		avg (mg/l)	max (mg/l)		

If you add any chemicals (eg. microbiocides, cooling water or boiler chemicals) you must provide the following information:
(1) The name of the manufacturer of each chemical used and list their composition or provide a copy of each Material Safety Data Sheet (MSDS).
(2) The concentration of the chemical additive estimated to be discharged in ppm or mg/l.
(3) The ecological toxicity information of the chemical if available. Specifically, the LC_{50} value for freshwater aquatic species which may be listed on the MSDS.

Attach additional sheets if necessary.

IV. Toxicity Test Data

If any biological test for acute or chronic toxicity has been conducted on any of your discharges within the past three years describe the test(s), their purpose(s) and the result(s).

Attach additional sheets if necessary.

Facility Name:		Outfall Number:	

V. EFFLUENT CHARACTERISTICS

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details

1. POLLUTANT	3. EFFLUENT							4. UNITS *(specify if blank)*		5. CERTIFIED LABORATORY NUMBER
	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE *(if available)*		LONG TERM AVG. VALUE *(if available)*		NO. OF ANALYSES			
	Concentration	Mass	Concentration	Mass	Concentration	Mass		Concentration	Mass	
a. Biochemical Oxygen Demand (BOD)										
b. Chemical Oxygen Demand (COD)										
c. Total Organic Carbon (TOC)										
d. Total Suspended Solids (TSS)										
e. Ammonia (as N)										
f. Flow								MILLION GALLONS PER DAY		
g. Temperature (October - March)								DEGREES FARENHEIT		
h. Temperature (April – September)								DEGREES FARENHEIT		
i. pH	Minimum	Maximum	Minimum	Maximum				STANDARD UNITS		

Part B – Mark "X" in Column 2A for each pollutant you know or have reason to believe is present. Mark "X" in Column 2B for each pollutant you believe to be absent. You must mark believed present for any pollutant limited either directly, or indirectly but expressly, in an effluent limitations guideline and you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark "Believed Present", you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See instructions for additional details and requirements.

1. POLLUTANT	2. MARK "X"		3. EFFLUENT							4. UNITS *(specify if blank)*		5. CERTIFIED LABORATORY NUMBER
	Believed Present	Believed Absent	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE *(if available)*		LONG TERM AVG. VALUE *(if available)*		NO. OF ANALYSES			
			Concentration	Mass	Concentration	Mass	Concentration	Mass		Concentration	Mass	
a. Bromide	☐	☐										
b. Chlorine, Total Residual	☐	☐										
c. Color	☐	☐										
d. *Escherichia coli* (E. coli)	☐	☐										
e. Fluoride	☐	☐										
f. Nitrate-Nitrite (as N)	☐	☐										

Facility Name:									Outfall Number:			
1. POLLUTANT	2. MARK "X"		3. EFFLUENT							4. UNITS *(specify if blank)*		5. CERTIFIED LABORATORY NUMBER
	Believed Present	Believed Absent	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE *(if available)*		LONG TERM AVG. VALUE *(if available)*		NO. OF ANALYSES			
			Concentration	Mass	Concentration	Mass	Concentration	Mass		Concentration	Mass	
g. Nitrogen Total Organic (as N)	☐	☐										
h. Oil and Grease	☐	☐										
i. Phosphorus, Total (as P)	☐	☐										
j. RADIOACTIVITY												
(1) Alpha, Total	☐	☐										
(2) Beta, Total	☐	☐										
(3)Radium, Total	☐	☐										
(4) Radium 226, Total	☐	☐										
k. Sulfate (as SO4)	☐	☐										
l. Sulfide (as S)	☐	☐										
m. Sulfite (as SO3)	☐	☐										
n. Surfactants	☐	☐										
o. Aluminum, Total	☐	☐										
p. Barium, Total	☐	☐										
q. Boron, Total	☐	☐										
r. Cobalt, Total	☐	☐										
s. Iron, Total	☐	☐										
t. Magnesium, Total	☐	☐										
u. Molybdenum, Total	☐	☐										
v. Manganese, Total	☐	☐										
w. Tin, Total	☐	☐										
x. Titanium, Total	☐	☐										

Facility Name:		Outfall Number:	

Part C – If you are an industry listed in Table 1 of the instructions, and this outfall contains process wastewater, refer to Table 1 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in Column 2(a) for all such GC/MS fractions that apply to your industry and for all metals, cyanide, and total phenols. If you are not required to mark column 2(a) (other industries, nonprocess wastewater outfalls, nonrequired GC/MS fractions), mark "X" in column 2(b) for each pollutant you know or have reason to believe is present. Mark "X" in column 2(c) for each pollutant you believe is absent. If you mark column 2(a) for any pollutant you must provide the results of at least one analysis for that pollutant. If you mark column 2(b) for any pollutant you must provide the results if you know or have reason to believe it will be discharged in concentrations of 10 ppb (µg/l) or greater. If you mark column 2(b) for acrolein, acrylonitrile, 2,4-dinitrophenol or 2-methyl, 4,6-dinitrophenol, you must provide the results of at least one analysis for each of these pollutqants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you marked column 2(b) you must either submit at least one analysis or briefly describe the reasons the pollutant is not expected to be discharged. Note that there are seven (7) pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT	2. MARK "X"			3. EFFLUENT						NO. O ANALYSES	4. UNITS *(specify if blank)*		5. CERTIFIED LABORATORY NUMBER
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE *(if available)*		LONG TERM AVG. VALUE *(if available)*					
				Concentration	Mass	Concentration		Mass			Concentration	Mass	
METALS, CYANIDE, AND TOTAL PHENOLS													
1M. Antimony, Total	☐	☐	☐										
2M. Arsenic, Total	☐	☐	☐										
3M. Beryllium, Total	☐	☐	☐										
4M. Cadmium, Total	☐	☐	☐										
5M. Chromium, Total	☐	☐	☐										
6M. Copper, Total	☐	☐	☐										
7M. Lead, Total	☐	☐	☐										
8M. Mercury, Total	☐	☐	☐										
9M. Nickel, Total	☐	☐	☐										
10M. Selenium, Total	☐	☐	☐										
11M. Silver, Total	☐	☐	☐										
12M. Thallium, Total	☐	☐	☐										
13M. Zinc, Total	☐	☐	☐										
14M. Cyanide, Total	☐	☐	☐										
15M. Phenols, Total	☐	☐	☐										
DIOXIN													
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin	☐	☐	☐	**DESCRIBE RESULTS**									

Facility Name:											Outfall Number:			
				3. EFFLUENT						NO. OF ANALYSES	4. UNITS (specify if blank)		5. CERTIFIED LABORATORY NUMBER
1. POLLUTANT	2. MARK "X"			MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVG. VALUE (if available)					
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	Concentration	Mass	Concentration	Mass	Concentration	Mass		Concentration	Mass	
GC/MS FRACTION – VOLATILE ORGANICS													
1V. Acrolein	☐	☐	☐										
2V. Acrylonitrile	☐	☐	☐										
3V. Benzene	☐	☐	☐										
4V. Bromoform	☐	☐	☐										
5V. Carbon Tetrachloride	☐	☐	☐										
6V. Chlorobenzene	☐	☐	☐										
7V. Chlorodi-bromomethane	☐	☐	☐										
8V. Chloroethane	☐	☐	☐										
9V. 2-Chloro-ethylvinyl Ether	☐	☐	☐										
10V. Chloroform	☐	☐	☐										
11V. Dichloro-bromomethane	☐	☐	☐										
12V. 1,1-Dichloro-ethane	☐	☐	☐										
13V. 1,2-Dichloro-ethane	☐	☐	☐										
14V. 1,1-Dichloro-ethylene	☐	☐	☐										
15V. 1,2-Dichloro propane	☐	☐	☐										
16V. 1,3-Dichloro-propylene	☐	☐	☐										
17V. Ethylbenzene	☐	☐	☐										
18V. Methyl Bromide	☐	☐	☐										
19V. Methyl Chloride	☐	☐	☐										
20V. Methylene Chloride	☐	☐	☐										
21V. 1,1,2,2 Tetrachloroethane	☐	☐	☐										

Facility Name:											Outfall Number:			
1. POLLUTANT	2. MARK "X"			3. EFFLUENT						NO. OF ANALYSES	4. UNITS *(specify if blank)*		5. CERTIFIED LABORATORY NUMBER
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE *(if available)*		LONG TERM AVG. VALUE *(if available)*					
				Concentration	Mass	Concentration	Mass	Concentration	Mass		Concentration	Mass	
22V. Tetrachloro-ethylene	☐	☐	☐										
23V. Toluene	☐	☐	☐										
24V. 1,2-Trans-Dichloroethylene	☐	☐	☐										
25V. 1,1,1-Tri-chloroethane	☐	☐	☐										
26V. 1,1,2-Tri-chloroethane	☐	☐	☐										
27V. Trichloro-ethylene	☐	☐	☐										
28V. Vinyl Chloride	☐	☐	☐										
GC/MS FRACTION - ACID COMPOUNDS													
1A. 2-Chlorophenol	☐	☐	☐										
2A. 2,4-Dichloro-pheno	☐	☐	☐										
3A. 2,4-Dimethyl-phenol	☐	☐	☐										
4A. 4,6-Dinitro-O-Cresol	☐	☐	☐										
5A. 2,4-Dinitro-phenol	☐	☐	☐										
6A. 2-Nitrophenol	☐	☐	☐										
8A. P-Chloro-M-Cresol	☐	☐	☐										
9A. Pentachloro-phenol	☐	☐	☐										
10A. Phenol	☐	☐	☐										
11A. 2,4,6-Tri-chlorophenol	☐	☐	☐										
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS													
1B. Acenaphthene	☐	☐	☐										
2B. Acenaphtylene	☐	☐	☐										
3B. Anthracene	☐	☐	☐										

Facility Name:										Outfall Number:			
1. POLLUTANT	2. MARK "X"			3. EFFLUENT						NO. OF ANALYSES	4. UNITS (specify if blank)		5. CERTIFIED LABORATORY NUMBER
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVG. VALUE (if available)					
				Concentration	Mass	Concentration	Mass	Concentration	Mass		Concentration	Mass	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS													
4B. Benzidine	☐	☐	☐										
5B. Benzo (a) Anthracene	☐	☐	☐										
6B. Benzo (a) Pyrene	☐	☐	☐										
7B. 3,4-Benzo-fluoranthene	☐	☐	☐										
8B. Benzo (ghi) Perylene	☐	☐	☐										
9B. Benzo (k) Fuoranthene	☐	☐	☐										
10B. Bis (2-Chlor-ethoxy) Methane	☐	☐	☐										
11B. Bis (2-Chloro Ethyl Ether	☐	☐	☐										
12B. Bis (2-Chloroiso-propyl) Ether	☐	☐	☐										
13B. Bis (2-ethyl-hexyl) Phthalate	☐	☐	☐										
14B. 4-Bromo- phenyl Phenyl Ether	☐	☐	☐										
15B. Butyl Benzyl Phthalate	☐	☐	☐										
16B. 2-Chloro-naphthalene	☐	☐	☐										
17B. 4-Chloro- phenyl Phenyl Ether	☐	☐	☐										
18B. Chrysene	☐	☐	☐										
19B. Dibenzo (a,h) Anthracene	☐	☐	☐										
20B. 1,2-Dichloro benzene	☐	☐	☐										
21B. 1,3-Dichloro-benzene	☐	☐	☐										
22B. 1,4-Dichloro-benzene	☐	☐	☐										
23B. 3,3'-Dichloro benzidine	☐	☐	☐										
24B. Diethyl Phthalate	☐	☐	☐										
25B. Dimethyl Phthalate	☐	☐	☐										

Facility Name:											Outfall Number:			
				3. EFFLUENT						NO. OF	4. UNITS		5. CERTIFIED
1. POLLUTANT	2. MARK "X"			MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVG. VALUE (if available)		ANALYSES	(specify if blank)		LABORATORY NUMBER
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	Concentration	Mass	Concentration	Mass	Concentration	Mass		Concentration	Mass	
26B. Di-N-Butyl Phthalate	☐	☐	☐										
27B. 2,4-Dinitro-toluene	☐	☐	☐										
28B. 2,6-Dinitro-toluene	☐	☐	☐										
29B. Di-N-Octyl Phthalate	☐	☐	☐										
30B. 1,2-Diphenyl-hydrazine	☐	☐	☐										
31B. Fluoranthene	☐	☐	☐										
32B. Fluorene	☐	☐	☐										
33B. Hexachloro-benzene	☐	☐	☐										
34B. Hexachloro-butadiene	☐	☐	☐										
35B. Hexachloro-cyclopentadiene	☐	☐	☐										
36B. Hexachloro-ethane	☐	☐	☐										
37B. Indeno- (1,2,3-cd) Pyrene	☐	☐	☐										
38B. Isophorone	☐	☐	☐										
39B. Naphthalene	☐	☐	☐										
40B. Nitrobenzene	☐	☐	☐										
41B. N-Nitro-sodimethylamine	☐	☐	☐										
42B. N -Nitrosodi- N-Propylamine	☐	☐	☐										
43B. N-Nitro-sodiphenylamine	☐	☐	☐										
44B. Phenanthrene	☐	☐	☐										
45B. Pyrene	☐	☐	☐										
46B. 1,2,4-Tri-chlorobenzene	☐	☐	☐										

Facility Name:										Outfall Number:			
				3. EFFLUENT						NO. OF ANALYSES	4. UNITS (specify if blank)		5. CERTIFIED LABORATORY NUMBER
1. POLLUTANT	2. MARK "X"			MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVG. VALUE (if available)					
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	Concentration	Mass	Concentration	Mass	Concentration	Mass		Concentration	Mass	
GC/MS FRACTION - PESTICIDES													
1P. Aldrin	☐	☐	☐										
7P. 4,4'-DDT	☐	☐	☐										
8P. 4,4'-DDE	☐	☐	☐										
9P. 4,4'-DDD	☐	☐	☐										
10P. Dieldrin	☐	☐	☐										
11P. Alpha-Endosulfan	☐	☐	☐										
12P. Beta-Endosulfan	☐	☐	☐										
13P. Endosulfan Sulfate	☐	☐	☐										
14. Endrin	☐	☐	☐										
15P. Endrin Aldehyde	☐	☐	☐										
16P. Heptachlor	☐	☐	☐										
17P. Heptachlor Epoxide	☐	☐	☐										
18P. PCB-1242	☐	☐	☐										
19P. PCB-1254	☐	☐	☐										
20P. PCB-1221	☐	☐	☐										
21P. PCB-1232	☐	☐	☐										
22P. PCB-1248	☐	☐	☐										
23P. PCB-1260	☐	☐	☐										
24P. PCB-1016	☐	☐	☐										
25P. Toxaphene	☐	☐	☐										

DO NOT SUBMIT THESE PAGES – FOR APPLICANT USE ONLY
FORM 3 – INSTRUCTIONS
FACILITIES THAT DISCHARGE PROCESS WASTEWATER – EXISTING SOURCES

Item I

List all sources of wastewater discharged through each outfall. Operations may be described in general terms (for example, "dye-making reactor" or "distillation tower"). You may estimate the flow contributed by each source if no data are available. For storm water discharges you may estimate the average flow, but you must indicate the rainfall event upon which the estimate is based and the method of estimation.

Item IIA

All effluent guidelines promulgated by EPA appear in the Federal Register and are published annually in 40 CFR Subchapter N. A guideline applies to you if you have any operations contributing **process** wastewater in any subcategory covered by a BPT, BCT, NSPS, or BAT guideline. You must check "yes" if an applicable effluent guideline has been promulgated, even if the guideline limitations are being contested in court. If you believe that a promulgated effluent guideline has been remanded for reconsideration by a court and does not apply to your operations, you may check "no".

Item IIB

An effluent guideline is expressed in terms of production (or other measure of operation) if the limitation is expressed as mass of pollutant per operational parameter; for example, "pounds of BOD per cubic foot of logs from which bark is removed," or "pounds of TSS per megawatt hour of electrical energy consumed by smelting furnace". An example of a guideline not expressed in terms of a measure of operation is one which limits the concentration of pollutants.

Item IIC

This item must be completed only if you checked "yes" to item II.B. The production information requested here is necessary to apply effluent guidelines to your facility. Report quantities in the units of measurement used in the applicable effluent guideline. The production figures provided must be based on actual daily production and not on design capacity or on predictions of future operations.

Item III

Self explanatory.

Item IV

Self explanatory.

Item V-A, B, and C

These items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants, you may be required to mark "X" in the "Testing Required" column, and test (sample and analyze) and report the levels of the pollutants in your discharge whether or not you expect them to be present in your discharge. For all others, you must mark "X" in either the "Believe Present" column or the "Believe Absent" column based on your best estimate, and test for those which you believe to be present. (See specific instructions on the form and below for Parts A through C.) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products, and by-products, and any previous analyses known to you of your effluent or similar effluent. (For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated storm water runoff.) If you would expect a pollutant to be present solely as a result of its presence in your intake water, you must mark "Believe Present" but you are not required to analyze for that pollutant.

A. Reporting. All levels must be reported as concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages 3 to 11 if the separate sheets contain all the required information. Use the following abbreviations in the columns headed "Units".

Concentration	**Mass**
ppm . . . . . .parts per million	lbs . . . . . pounds
mg/l. . . . . milligrams per liter	
ppb . . . .parts per billion	
ug/l. . . . . .micrograms per liter	

If you measure only one daily value, complete only the "Maximum Daily Values" columns and insert "1" into the "Number of Analyses" column. If requested you may be required to conduct additional analyses to further characterize your discharges. For composite samples, the daily value is the total mass or average concentration found in a composite sample taken over the operating hours of the facility during a 24-hour period; for grab samples, the daily value is the arithmetic or flow-weighted total mass or average concentration found in a series of at least four grab samples taken over the operating hours of the facility during a 24-hour period.

If you measure more than one daily value for a pollutant and those values are representative of your waste stream, you must report them. You also must determine the average of all values within the last year and report the concentration and mass under the "Long Term Average Values" columns and the total number of daily values under the "Number of Analyses" columns. Also, determine the average of all daily values taken during each calendar month, and report the highest average under the "Maximum 30-day Values" columns.

B. Sampling. The collection of samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. Any specific requirements contained in the applicable analytical methods must be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes which contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Samples must be collected during dry weather when the discharge is not influenced by storm water runoff. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, the volatile organics fraction of the GC/MS, and *Escherichia coli* (E. coli), grab samples must be used. For all other pollutants 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours. The Director may waive composite sampling for any outfall for which you demonstrate that use of an automatic sampler is infeasible and that a minimum of four grab samples will be representative of your discharge.

Data from samples taken in the past may be used, provided that:

(i) All data requirements are met;

(ii) Sampling was done no more than three years before submission; and

(iii) All data are representative of the present discharge.

(iv) Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in wastewater treatment. The Director may request additional information, including current quantitative data, if she or he determines it to be necessary to assess your discharges.

C. Analysis: You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge. Samples collected after October 1, 1996 must be analyzed by a laboratory certified in the State of Iowa to perform the required analysis except for pH, residual chlorine, dissolved oxygen, settleable solids and other pollutants that must be analyzed immediately upon collection of the sample. If you have two or more substantially identical outfalls, you may request permission to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted, on a separate sheet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

D. Reporting of Intake Data: If you wish to demonstrate your eligibility for a "net" effluent limitation for one or more pollutants, that is, an effluent limitation adjusted by subtracting the average level of the pollutant(s) present in your intake water you must report the results of at least one analysis of your raw water for the pollutant(s). NPDES regulations allow net limitations only in certain circumstances. To demonstrate your eligibility, on a separate sheet of paper, report the average of the results of analyses on your intake water (if your water is treated before use, test the water after it is treated) and discuss the requirements for a net limitation with your permitting authority.

PART V-A

Part V-A must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water. However, at your request, the Director may waive the requirements to test for one or more of these pollutants, upon a determination that available information is adequate to support issuance of the permit with less stringent reporting requirements for these pollutants.

Use composite samples for all pollutants in this Part, except use grab samples for pH and temperature. See discussion in General Instructions to Item V for definitions of the columns in Part A. The "Long Term Average Values" column and "Maximum 30-day Values" column are not compulsory but should be filled out if data are available.

PART V-B

Part V-B must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water. You must report quantitative data if the pollutant(s) in question is limited in an effluent limitations guideline either directly or indirectly, but expressly through limitation on an indicator (e.g., use of TSS as an indicator to control the discharge of iron and aluminum). For other discharged pollutants you must provide quantitative data or explain their presence in your discharge. Use composite samples for all pollutants you analyze for in this part, except use grab samples for residual chlorine, oil and grease, and *Escherichia coli* (E. coli). The "Long Term Average Values" column and "Maximum 30-day Values" column are not compulsory but should be filled out if data are available.

PART V-C

Table 1 lists the 34 "primary" industry categories in the left-hand column. For each outfall, if any of your processes which contribute wastewater falls into one of those categories, you must mark "X" in the "Testing Required" column and test for (1) all of the toxic metals, cyanide, and total phenols, and (2) the organic toxic pollutants contained in Table 1 applicable to your category, unless you qualify as a small business (see below). The organic toxic pollutants are listed by GC/MS fractions on pages 6 to 11 in Part V-C. For example, the Organic Chemicals Industry has an “X” in all four fractions; therefore, applicants in this category must test for all organic toxic pollutants in Part V-C. The inclusion of total phenols in Part V-C is not intended to classify total phenols as a toxic pollutant. When you determine which industry category you are in to find your testing requirements, you are not determining your category for any other purpose and you are not giving up your right to challenge your inclusion in that category (for example, for deciding whether an effluent guideline is applicable) before your permit is issued. For all other cases (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), you must mark "X" in either the "Believed Present" column or the "Believed Absent" column for each pollutant. For every pollutant you know or have reason to believe is present in your discharge in concentrations of 10 ppb or greater, you must report quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4, 6 dinitrophenol, where you expect these four pollutants to be discharged in concentrations of 100 ppb or greater, you must report quantitative data. For every pollutant expected to be discharged in concentrations less than the thresholds specified above, you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. If you qualify as a small business (see below) you are exempt from testing for the organic toxic pollutants, listed on pages 6 to 11 in Part V-C. The "Long Term Average Values" column and "Maximum 30-day Values" column are not compulsory but should be filled out if data are available. You are required to mark "Testing Required" for dioxin if you use or manufacture one of the following compounds:

(a) 2,4,5-trichlorophenoxy acetic acid, (2,4,5-T);
(b) 2-(2,4,5-trichlorophenoxy) propanoic acid, (Silvex, 2,4,5-TP);
(c) 2-(2,4,5-tricholorphenoxy) ethyl 2,2-dicholoropropionate, (Erbon);
(d) O,O-dimethyl O-(2,4,5-tricholorphenyl) phosphorothioate, (Ronnel);
(e) 2,4,5-tricholorphenol, (TCP); or
(f) hexachlorophene, (HCP).

If you mark "Testing Required" or "Believed Present," you must perform a screening analysis for dioxins, using gas chromotography with an electron capture detector. A TCDD standard for quantitation is not required. Describe the results of this analysis in the space provided; for example, "no measurable baseline deflection at the retention time of TCDD" or "a measurable peak within the tolerances of the retention time of TCDD." The permitting authority may require you to perform a quantitative analysis if you report a positive result.

Small Business Exemption - If you are a "small business," you are exempt from the reporting requirements for the organic toxic pollutants listed in Part V-C. There are two ways in which you can qualify as a "small business":

i. If your facility is a coal mine, and if your probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production (such as a schedule of estimated total production under 30 CFR 795.14(c)) instead of conducting analyses for the organic toxic pollutants.

ii. If your facility is not a coal mine, and if your gross total annual sales for the most recent three years average less than $100,000 per year (in second quarter 1980 dollars), you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants.

The production or sales data must be for the facility which is the source of the discharge. The data should not be limited to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intracorporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 by using the gross national product price deflator (second quarter of 1980=100). This index is available in National Income and Product Accounts of the United States (Department of Commerce, Bureau of Economic Analysis)

TABLE 1
TESTING REQUIREMENTS FOR ORGANIC PRIORITY POLLUTANTS

4O CFR Part Number	Industry Category	Production Based Guideline	GC/MS Fractions			
			Volatile	Acid	Base/Neutral	Pesticide
456	Adhesives and sealants		X	X	X	-
467	Aluminum forming	*	X	X	X	-
444	Auto and other laundries		X	X	X	X
461	Battery manufacturing	*	X	-	X	-
465	Coil coating		X	X	X	-
468	Copper forming		X	X	X	-
469	Electrical and electronic components		X	X	X	X
413	Electroplating		X	X	X	-
457	Explosives manufacturing		-	X	X	-
433	Metal finishing		X	X	X	-
464	Metal molding and casting	*	X	X	X	-
454	Gum and wood chemical manufacturing (Except subparts D and F)		X	X	-	-
	Subpart D - tall oil rosin		X	X	X	-
	Subpart F - rosin-based derivatives		X	X	X	-
415	Inorganic chemicals manufacturing		X	X	X	-
420	Iron and steel manufacturing	*	X	X	X	-
425	Leather tanning and finishing	*	X	X	X	-
471	Nonferrous metals forming		X	X	X	X
440	Ore mining and dressing		-	X	-	-
414	Organic chemicals, plastics and synthetic fibers		X	X	X	X
447	Paint formulating		X	X	X	-
446	Ink formulating		X	X	X	-
455	Pesticide chemicals	*	X	X	X	X
419	Petroleum refining		X	-	-	-
439	Pharmaceutical preparations		X	X	X	-
459	Photographic equipment and supplies		X	X	X	-
463	Plastics molding and forming		X	-	-	-
448	Printing and publishing		X	X	X	X
430	Pulp, paper and paperboard		-	-	-	-
428	Rubber processing		X	X	X	-
417	Soap and detergent manufacturing		X	X	X	-
423	Steam electric power plants	*	X	X	-	-
410	Textile mills (except Subpart C)		X	X	X	-
429	Timber products processing		X	X	O	X
	Subpart A		O	X	O	O
	Subparts B, C, D, R		O	X	O	O
	Subpart E		X	X	O	X
	Subparts F, G, H, I, K		X	X	O	O
	Subparts L, M, N, O, P		X	X	O	O
	Subparts J, U		X	X	X	O
	Subparts Q, S, T		X	X	O	X

* A production based effluent guideline has been promulgated by EPA in accordance with Section 402 of the Clean Water Act
GC/MS = Gas Chromatography/Mass Spectrometry
X = Testing required
- = Testing not required
O = Testing required only if believed present

TABLE 2
HAZARDOUS SUBSTANCES

1. Acetaldehyde
2. Acetic acid
3. Acetic anhydride
4. Acetone cyanohydrin
5. Acetyl bromide
6. Acetyl chloride
7. Acrolein
8. Acrylonitrile
9. Adipic acid
10. Aldrin
11. Allyl alcohol
12. Allyl chloride
13. Aluminum sulfate
14. Ammonia
15. Ammonium acetate
16. Ammonium benzoate
17. Ammonium bicarbonate
18. Ammonium bichromate
19. Ammonium biflouride
20. Ammonium bisulfate
21. Ammonium carbamate
22. Ammonium carbonate
23. Ammonium chloride
24. Ammonium chromate
25. Ammonium citrate
26. Ammonium fluroborate
27. Ammonium fluoride
28. Ammonium hydroxide
29. Ammonium oxalate
30. Ammonium silicofluoride
31. Ammonium sulfamate
32. Ammonium sulfide
33. Ammonium sulfite
34. Ammonium tartrate
35. Ammonium thiocyanate
36. Ammonium thiosulfate
37. Amyl acetate
38. Aniline
39. Antimony pentachloride
40. Antimony potassium tartrate
41. Antimony tribromide
42. Antimony trichloride
43. Antimony trifluoride
44. Antimony trioxide
45. Arsenic disulfide
46. Arsenic pentoxide
47. Arsenic trichloride
48. Arsenic trioxide
49. Arsenic trisulfide
50. Barium cyanide
51. Benzene
52. Benzoic acid
53. Benzonitrile
54. Benzoyl chloride
55. Benzyl chloride
56. Beryllium chloride
57. Beryllium fluoride
58. Beryllium nitrate
59. Butylacetate
60. n-Butylphthalate
61. Butylamine
62. Autryic acid
63. Cadmium acetate
64. Cadmium bromide
65. Cadmium chloride
66. Calcium arsenate
67. Calcium arsenite
68. Calcium carbide
69. Calcium chromate
70. Calcium cyanide
71. Calcium dodecylbenzenesulfonate
72. Calcium hypochlorite
73. Captan
74. Carbaryl
75. Carbofuran
76. Carbon disulfide
77. Carbon tetrachloride
78. Chlordane
79. Chlorine
80. Chlorobenzene
81. Chloroform
82. Chlorpyrifos
83. Chlorosulfonic acid
84. Chromic acetate
85. Chromic acid
86. Chromic sulfate
87. Chromous chloride
88. Cobaltous chloride
89. Cobaltus bromide
90. Cobaltous formate
91. Coumaphos
92. Cresol
93. Crotonaldehyde
94. Cupric acetate
95. Cupric acetoarsenite
96. Cupric chloride
97. Cupric nitrate
98. Cupric oxalate
99. Cupric sulfate
100. Cupric sulfate ammoniated
101. Cupric tartrate
102. Cyanogen chloride
103. Cyclohexane
104. 2,4-D acid (2,4-Dichlorophenoxyacetic acid)
105. 2,4-D esters (2,4,-Dichlorophenoxyacetic acid esters)
106. DDT
107. Diazanon
108. Dicamba
109. Dichlobenil
110. Dichlone
111. Dichlorobenzene
112. Dichloropropane
113. Dichloropropene
114. Dichloropropene-dichloropropane mix
115. 2,2-Dichloropropionic acid
116. Dichlorvos
117. Dieldrin
118. Diethylamine
119. Dimethylamine
120. Dinitrobenzene
121. Dinitrophenol
122. Dinitrotoluene
123. Diquat
124. Disulfoton
125. Diuron
126. Dodecylbenzenesulfonic acid
127. Endosulfan
128. Endrin
129. Epichlorohydrin
130. Ethion
131. Ethylbenzene
132. Ethylenediamine
133. Ethylene dibromide
134. Ethylene dichloride
135. Ethylene diaminetetracetic acid (EDTA)
136. Ferric ammonium citrate
137. Ferric ammonium oxalate
138. Ferric chloride
139. Ferric fluoride
140. Ferric nitrate
141. Ferric sulfate
142. Ferrous ammonium sulfate
143. Ferrous chloride
144. Ferrous sulfate
145. Formaldehyde
146. Formic acid
147. Fumaric acid
148. Furfural
149. Guthion
150. Heptachlor

TABLE 2
HAZARDOUS SUBSTANCES

151. Hexachlorocyclopentadiene
152. Hydrochloric acid
153. Hydrofluoric acid
154. Hydrogen cyanide
155. Hydrogen sulfide
156. Isoprene
157. Isopropanolamine dodecylbenzenesulfonate
158. Kelthane
159. Kepone
160. Lead acetate
161. Lead arsenate
162. Lead chloride
163. Lead fluoroborate
164. Lead fluoride
165. Lead iodide
166. Lead nitrate
167. Lead strearate
168. Lead sulfate
169. Lead sulfide
170. Lead thiocyanate
171. Lindane
172. Lithium chromate
173. Malathion
174. Maleic acid
175. Maleic anhydride
176. Mercaptodimethur
177. Mercuric cyanide
178. Mercuric nitrate
179. Mercuric sulfate
180. Mercuric thiocyanate
181. Mercurous nitrate
182. Methoxychlor
183. Methyl mercaptan
184. Methyl methacrylate
185. Methyl parathion
186. Mevinphos
187. Mexacarbate
188. Monoethylamine
189. Monomethylamine
190. Naled
191. Naphthalene
192. Naphthenic acid
193. Nickel ammonium sulfate
194. Nickel chloride
195. Nickel hydroxide
196. Nickel nitrate
197. Nickel sulfate
198. Nitric acid
199. Nitrobenzene
200. Nitrogen dioxide
201. Nitrophenol
202. Nitrotoluene
203. Paraformaldehyde
204. Parathion
205. Pentachlorophenol
206. Phenol
207. Phosgene
208. Phosphoric acid
209. Phosphorus
210. Phosphorus oxychloride
211. Phosphorus pentasulfide
212. Phosphorus trichloride
213. Polychlorinated biphenyls (pcb's)
214. Potassium arsenate
215. Potassium arsenite
216. Potassium bichromate
217. Potassium chromate
218. Potassium cyanide
219. Potassium hydroxide
220. Potassium permanganate
221. Propargite
222. Propionic acid
223. Propionic anhydride
224. Propylene oxide
225. Pyrethrins
226. Quinoline
227. Resorcinol
228. Selenium oxide
229. Silver nitrate
230. Sodium
231. Sodium arsenate
232. Sodium arsenite
233. Sodium bichromate
234. Sodium bifluoride
235. Sodium bisulfite
236. Sodium chromate
237. Sodium cyanide
238. Sodium dodecylbenzenesulfonate
239. Sodium fluoride
240. Sodium hydrosulfide
241. Sodium hydroxide
242. Sodium hypochlorite
243. Sodium methylate
244. Sodium nitrite
245. Sodium phosphate (dibasic)
246. Sodium phosphate (tribasic)
247. Sodium selinite
248. Strontium chromate
249. Strychnine
250. Styrene
251. Sulfuric acid
252. Sulfur monochloride
253. 2,4,5-T acid (2,4,5-Trichlorophenoxyacetic acid)
254. 2,4,5-T amines (2,4,5-Trichlorophenoxyacetic acid amines)
255. 2,4,5-T esters (2,4,5-Trichlorophenoxyacetic acid esters)
256. 2,4,5-T salts (2,4,5-Trichlorophenoxyaceticacid salts)
257. 2,4,5-TP acid (2,4,5-Trichlorophenoxy propanoic acid)
258. 2,4,5-TP esters (2,4,5-Trichlorophenoxy propanoic esters)
259. TDE (Tetrachlorodiphenyl ethane)
260. Tetraethyl lead
261. Tetraethyl pyrophosphate
262. Thallium sulfate
263. Toluene
264. Toxaphene
265. Trichlorofon
266. Trichloroethylene
267. Trichlorophenol
268. Triethanolamine dodecylbenzenesulfonate
269. Triethlamine
270. Trimethylamine
271. Uranyl acetate
272. Uranyl nitrate
273. Vanadium pentoxide
274. Vanadyl sulfate
275. Vinyl acetate
276. Vinylidene chloride
277. Xylene
278. Xylenol
279. Zinc acetate
280. Zinc ammonium chloride
281. Zinc borate
282. Zinc bromide
283. Zinc carbonate
284. Zinc chloride
285. Zinc cyanide
286. Zinc fluoride
287. Zinc formate
288. Zinc hydrosulfide
289. Zinc nitrate
290. Zinc phenolsulfonate
291. Zinc phosphide
292. Zinc silicofluoride
293. Zinc sulfate
294. Zirconium nitrate
295. Zirconium potassium fluoride
296. Zirconium sulfate
297. Zirconium tetrachloride